

REMARKS

Claims 1-5, 39-54, and 72-81 are pending in the current application. Of the above claims, 39-54 have been withdrawn from consideration as drawn to a method of practicing the invention. Therefore, claims 1-5 and 72-81 are currently pending in the present application and stand rejected. Claims 1 and 81 have been currently amended, while Claims 39-54 have been cancelled without prejudice to their introduction in a later filed application.

Elections/Restrictions

Claims 39-54 have previously been withdrawn from consideration as being drawn to a non-elected invention. These claims are now being cancelled without prejudice to being introduced into a later filed divisional application, to allow the present amendment to be a complete response to the final rejection dated April 20, 2004.

35 USC § 103 Rejections

The Examiner rejects claims 1-5 and 72-81 as being obvious under 35 U.S.C. §103(a) in view of the combination of the Bartels, et al. U.S. Patent No. 4,621,632 (hereinafter '632) when it is combined with the Danielle, et al. U.S. Patent No. 6,050,260 (hereinafter '260). The Examiner states "Bartels, et al. teaches all of the limitation of the claims except for explicitly reciting a humidity sensing means and a monitoring means connected to the humidity sensing means for monitoring the humidity of the gas and keeping it within a determined threshold. Danielle, et al. teaches a humidity sensing means and a monitoring means for monitoring the humidity of the gas and keeping it within a determined threshold. It would have been obvious to one of ordinary skill in the art, at the time of invention, to have modified the humidity device of Bartels to monitor humidity by a humidity sensing means, while keeping the humidity with a predetermined range or threshold for the well-known purpose of preventing a cavity that is normally moist from drying out thereby causing inflammation causing discomfort."

In the "Response to Arguments" section on page 3 of the Official Action, the Examiner states that the intended use in laproscopic surgery is not relevant to apparatus claims, only to method claims, in that it imposes no structural limitation on the claimed apparatus. The Examiner states that the combination teaches applicants' broadly claimed apparatus. The Examiner admits that "the combination as recited in Bartels may suffer from the deficiencies of knowing what the humidity is in the system" and states that "Danielle remedies the supposed deficiencies by indicating the use of a humidity sensor." It is obviously the intent of Danielle to provide and maintain a base level of humidity.

However, in doing so, the Examiner ignores the limitation of Claim 1, which requires that a signal be generated when the humidity of the gas existing the chamber drops below a predetermined threshold to prevent the chamber from going dry. Daniell, et al. and Bartels, et al., whether taken singly, or in combination, simply do not do this. Both constructions can run dry with no signal being produced.

Danielle et al., simply uses a reading representing humidity to turn up the fan speed as the humidity increases. Nothing is evident which would prevent the humidification chamber from running out of water.

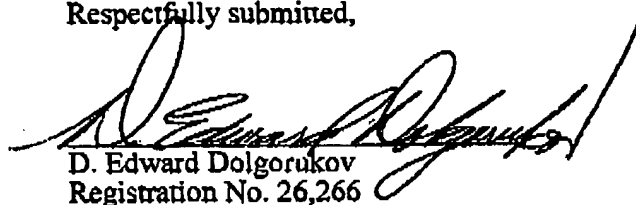
In Bartels, et al., the only control of the water in the reservoir 50 is water delivered through the delivery tube 20 which, as stated at column 5, lines 21-30, is interfaced with a solenoid operated, normally closed, pinch valve 22, which is periodically opened to permit a measured volume of water to be controllably delivered by way of tube 20 and intake spout 21 to a humidifier chamber water reservoir at the interior of base portion 31. Thus, the opening and closing of the water supply in Bartels, et al. is based on time only, and not on humidity. Bartels, et al. admits at Column 9, lines 26-29 that his chamber could become dry.

In view of the above, in addition to all the reasons already in the record why there is no motivation to combine Bartels, et al, with Daniell, et al., which are specifically re-stated herein, no one in the art would want to make a construction which has nothing to prevent the chamber from going dry because when such chamber would go dry, all the problems which the invention was supposed to solve would re-appear. In Daniell, et al., when the chamber runs out of water, presumably the fan speed would go back down, but the chamber would be dry, and the damage to the pneumoperitoneum would be done. Worse yet, in Bartels, et al., it is anticipated that the chamber will go dry occasionally. The combination suggested by the Examiner can fare no better. Using the humidity sensor of Daniell, et al. to prevent the water return reservoir 52 of Bartels et al. from going dry would still not prevent the vapor storage chamber 58 of the shroud portion 30 of Bartels et al. from having insufficient vapor (humidity). No combination of Bartels et al. and Daniell, et al. can produce a combination which does not pose the danger of the chamber going dry, and dry air being supplied. This is exactly the problem Applicants are trying to prevent, and exactly why a recharge signal is produced. In order for the combination proposed by the Examiner to generate an alarm when the humidity falls below a certain level, the entire principle of operation of the references would need to be changed, and this is simply not acceptable, In re Ratti, 123 USPQ 349 (CCPA 1959).

Claim 81 has been amended to provide that the apparatus for delivering gas is a trocar for insertion into the abdomen of a patient. Neither Bartels et al., or Daniell et al. show delivery of gases to a patient, and thus, Claim 81 is allowable.

In view of the above amendments, and the remarks explanatory thereof, a favorable reconsideration of the present application, and the passing of this case to issue is courteously solicited.

Respectfully submitted,



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